

REMARKS/ARGUMENTS

Claim 1 is amended to include the limitations of claim 4; support can be found in original claim 4. Support for the amendment to claim 4 can be found in the originally filed specification at, e.g., page 13, lines 12-18. Support for the amendment to claim 26 can be found in original claim 1. New claim 28 is supported by original claim 1 and Example 11.

No new matter has been added.

Rejection under 35 U.S.C. § 102/103

1. The rejection of Claims 1-5 and 13-20 under 35 U.S.C. §102(a) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over "Poly(vinyl alcohol) Stabilization of Acrylic Emulsion Polymers Using the Miniemulsion Approach" *Macromolecules*, 2003; 36 (15), p. 5573-5579 ("*Kim*") is respectfully traversed.

*Kim* contains no disclosure of PVA that "comprises at least 1.9 mol% of a 1,2-glycol bond." See amended claim 1, formatting omitted. In fact, *Kim* discloses the use of PVA "Poval 205" (see "Materials" paragraph under "Experimental Section" on page 5574 of *Kim*); Poval 205 is the same PVA used in Example 1 of the present application, where the 1,2-glycol content is said to be 1.6 mol%—see Table 1 of the present application and paragraph bridging pages 28 and 29 of the originally filed specification. *Kim* does not disclose all limitations of the present claims and therefore does not anticipate the present claims.

Further, *Kim* does not suggest the presently claimed emulsions, because there is no suggestion whatsoever in *Kim* of using a different PVA—the only one used is Poval 205. Therefore, the limitation of present claim 1: "comprises at least 1.9 mol% of a 1,2-glycol bond" is not disclosed or suggested by this reference, and there is no motivation in *Kim* to change the 1,2-glycol bond content. Thus, the present claims are not obvious in view of *Kim*.

The following comparison is a comparison between an inventive emulsion composition (and the film produced therewith) and an emulsion that is a closer to the inventive emulsion than what is allegedly disclosed in the cited reference.

Example 11 of the present application uses a PVA having 2.5 mol% of 1,2-glycol bond and Example 2 uses the *Kim* PVA (a PVA having 1.6 mol% of a 1,2-glycol bond). Examples 11 and 2 were run in the same way except for the difference in PVA—see page 44, "Example 11" of the originally filed specification. In the emulsion evaluation (where the emulsion is applied to a substrate and dried to result in a film), the film resulting from the emulsion of Example 11 had a higher film strength and a higher resistance to swelling than the film derived from Example 2. See claims 1 and 4. Thus, the improved performance of a film obtained with the inventive emulsion (Example 11) would not have been foreseen by one of ordinary skill in the art considering *Kim* at the time of the present invention.

See also new claim 28: "wherein said emulsion has a "factor a" of at least 0.9...a tensile strength of at least 160 kg/cm<sup>2</sup>...the vinyl alcohol polymer comprises at least 2.5 mol% of a 1,2-glycol bond." *Kim* especially fails to suggest this claim.

Withdrawal of the rejection is respectfully requested.

2. The 35 USC § 103(a) rejection of claims 14-24 in view of *Kim* and JP 2002-3089839 ("JP '839") is respectfully traversed for the same reasons give above. No matter what JP '839 discloses in regard to 1,2-glycol content, there is no suggestion to modify the PVA of *Kim*. Thus, the results obtained for the emulsions of the present claims (discussed above) would not have been foreseen by one of ordinary skill in the art considering such references at the time of the present invention.

Withdrawal of the rejection is respectfully requested.

Other matters

The objection to and rejection under 35 USC § 112, 2<sup>nd</sup> paragraph of claim 26 (paragraphs 3 and 4 of the Office Action) have each been obviated by amendment to the claim. Withdrawal of the objection and rejection is respectfully requested.

Conclusion

Applicants respectfully submit that the above-identified application is in condition for allowance. Notification thereof is requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, L.L.P.



Benjamin A. Vastine, Ph.D.  
Registration No. 64,422

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 07/09)